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EXAMINER

GRAHAM, CLEMENT B

ART UNIT PAPER NUMBER

3628

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/764,068

**Applicant(s)**

EDER, JEFF SCOTT

**Examiner**

Clement B Graham

**Art Unit**

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 1, and 3, are rejected under 35 U.S.C. 112, second paragraph, because there is no steps or procedure in performing the claimed invention.  
Claim 1 is so broad and indefinite that it encompasses every conceivable step for performing the claimed function.
3. In particular, Claim 3 line 1 indicates "wherein the variety of data sources includes different or a variety of systems, while 10 states " user input and combination thereof", it is unclear how one would be able to combine these systems.  
Appropriate correction is required

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. 42  
9-30-04 Claims 16-24 and 31-32, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, claims 16, recite in the limitations " the relative ranking",  
Claim 17, recite in the limitations " the real option discount rate"  
Claims 18-19, 21, recites in the limitations " the predictive models"  
Claim 20, recite in the limitations " the type of predictive models"  
Claim 22, recite in the limitations " the contribution by element value "  
Claim 23, recite in the limitations " the valuations identify"  
Claim 24, recite in the limitations " the current operation"  
Claim 25, recite in the limitations " the enterprise may"  
Claim 26, recite in the limitations " the business value"  
Claims 27-28, recites in the limitations " the current operation"

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Claims 31-32 recites in the limitations " the element quantifications  
There is insufficient antecedent basis for these limitations in the claims.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkins. U.S Patent 5, 82, 811 in view of Tull, Jr et al (Hereinafter Tull, Jr U.S Patent 6, 092, 056.

As per claims 1, Atkins discloses a computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform a quantification method, comprising:

*9-30-04*  
using data from a variety of sources. (see <sup>column</sup> 22 lines 50-65 and column 23 and 24 lines 1-35 and line 60-65) and Enterprise. ("i. e, financial institution" see column 5 lines 29-31"). Tull, Jr fail to explicitly to quantify the impact of elements of value on aspects of financial performance.

However Tull, Jr discloses providing data processing means for determining a price for a basket of shares which is packaged as a debt instrument so as to reflect the current aggregate value of the shares and accrued income and expenses associated with all shares in the basket. (see column 3 lines 33-37) and provide a financial management system to develop and administer a financial debt instrument traded as a listed security to investors desiring to track the performance of a domestic or foreign capital market.(see column 3 lines 20-25 and column 6 lines 6-15 and column 7 lines 1-65).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include quantifying the impact of elements of value on aspects of enterprise financial performance taught by

Tull, Jr in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security markets within a limited period of time. More particularly, the invention relates to an integrated financial management system for implementing investor participation in domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

As per claim 2, Atkins discloses wherein the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, intellectual property, partnerships, processes, production equipment, vendors and vendor relationships.(see column 28 lines 15-40).

As per claim 3, Atkins discloses wherein the variety of data sources includes advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, estimating systems, intellectual property management systems, process management systems, supply chain management systems, vendor management systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, purchasing systems, web site systems, the Internet, external databases, user input and combinations thereof.(see column 22 lines 50-65 and column 23 lines 1-40 and column 24 lines 5-20).

As per claim 4, Atkins discloses where an enterprise is defined by a single product, a group of products, a division or an entire company.(see column 3 lines 6-11).

As per claim 5, Atkins discloses wherein the aspects of enterprise financial performance include one or more of the following revenue, expense, capital change, current operation value, real option value, market sentiment value and business value.(see column 5 line 30).

As per claim 6, Atkins fail to explicitly teach where the elements of value are comprised of items that may be grouped into sub-elements of value for more detailed analysis.

However Tull, Jr discloses this selection is done in accordance with one embodiment of the present invention using a mathematical programming function which employs data means for receiving and storing data about each stock in the capital market portfolio modeling means which correlate the available data with economic forecast models to suggest an optimal basket of stock shares; and risk evaluation means predicting the future correlation of the selected stocks in the basket with the market valuation. Risk evaluation means employs a multi-factor risk model and relies on optimization techniques to ensure that the subset of stocks underlying an OPALS will track the market index as closely as possible. The cooperation between data means, modeling means and risk evaluation means results in a basket of stock shares whose weighing further reflects liquidity considerations, industry exposure and market capitalization.(see column 7 lines 15-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include elements of value are comprised of items that may be grouped into sub-elements of value for more detailed analysis taught by Tull, Jr in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security markets within a limited period of time and more particularly, the invention relates to an integrated financial management system for implementing investor participation in domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

As per claim 7, As per claim Atkins discloses where the data includes historical data and forecast data.(see column 37 lines 15-19).

As per claim 8, Atkins discloses where the data includes transaction data, geospatial data, text data and linkage data.(see column 24 lines 1-65)

As per claims 9-10, Atkins fail to explicitly teach where the element quantifications are selected from the group consisting of item performance indicators, composite variables; vectors, predictive models, element rankings, option discount rates, valuations and combinations thereof.

However Tull, Jr discloses Among the various investment options, significant popularity in last years have achieved the mutual funds which offer a variety of investment options tailored to specific customer needs. Different funds are designed to invest in particular types of stocks, in specific industry sectors, or track the performance of broader market indicators. Some funds offer income which is free of federal, state or local taxes, dependent on the residence of the investors. Mutual funds are particularly attractive because they provide the investors with the opportunity to participate in the capital markets for a relatively low fee compared to a direct investment in stocks. These investors fees are in part used to finance research directed to selecting a specific investment portfolio for each fund.(see column 2 lines 1-15 and column 6 lines 6-15 and 3 lines 19-21).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include where the element quantifications are selected from the group consisting of item performance indicators, composite variables; vectors, predictive models, element rankings, option discount rates, valuations and combinations thereof taught by Tull, Jr in order to determine the value of asset.

As per claim 11, Atkins fail to explicitly teach where item performance indicators are selected from the group consisting of ratios, trends, summaries, time lagged values, rates of change, patterns, geospatial measures, linkage data, text counts and averages.

However Tull, Jr discloses the selection is done in accordance with one embodiment of the present invention using a mathematical programming function which employs data means for receiving and storing data about each stock in the capital market;  
portfolio modeling means which correlate the available data with economic forecast models to suggest an optimal basket of stock shares; and risk evaluation means predicting the future correlation of the selected stocks in the basket with the market valuation. Risk evaluation means employs a multi-factor risk model and relies on optimization techniques to ensure that the subset of stocks underlying an OPALS will track the market index as closely as possible. The cooperation between data means,

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modeling means and risk evaluation means results in a basket of stock shares whose weighing further reflects liquidity considerations, industry exposure and market capitalization.(see column 7 lines 15-30 and column 6 lines 6-15 and column 2 lines 1-15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include where item performance indicators are selected from the group consisting of ratios, trends, summaries, time lagged values, rates of change, patterns, geospatial measures, linkage data, text counts and averages taught by Tull, Jr in order to determine the value of asset.

As per claim 12, Atkins discloses wherein item performance indicators are selected using predictive models from the group consisting of neural networks; regression models, regression trees; generalized autoregressive conditional heteroskedasticity (LARCH), projection pursuit regression; generalized additive model (GAM); redundant regression network; rough-set analysis; Naive Bayes Regression, linear regression; support vector computer readable medium, stepwise regression and multivalent models. (see column 23 lines 10-40).

As per claim 13, Atkins discloses 13 wherein composite variables are mathematical or logical combinations of causal item performance indicators and item variables by element.(see column 35 lines 11-18)

As per claim 14, Atkins and Tull, Jr fail to explicitly teach wherein vectors summarize causal item performance indicators, item variables and composite variables by element of value.

However vectors summarize causal item performance indicators, item variables and composite variables by element of value and commonly used in determining values of an asset or a portfolio.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins and Tull, Jr to include vectors summarize causal item performance indicators, item variables and composite variables



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by element of value because their are commonly used in determining values of an asset or a portfolio.

As per claim 15, Atkins and Tull, Jr fail to explicitly teach wherein vectors are created using models from the group consisting of Tetrad, Minimum Message Length, LaGrange, Bayesian and path analysis.

However models are commonly used in the art for valuing and optimization of assets stocks, portfolio, or and creating classes or column or association and vectors would have been an obvious part of the process asset optimization.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins and Tull, Jr to include vectors are created using models from the group consisting of Tetrad, Minimum Message Length, LaGrange, Bayesian and path analysis because models are commonly used in the art for valuing and optimization of assets stocks, portfolio, or and creating classes or column or association and vectors would have been an obvious part of the process asset optimization.

As per claim 16, Atkins fail explicitly wherein data envelopment analysis (DEA) analysis is used to identify the relative ranking of the enterprise elements of value for the value relevant indicators identified by the business value predictive models.

However Tull, Jr modeling system selects an optimized basket of shares which is representative of a particular capital market. This selection is done using a programming function which receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the basket with the index of the market to ensure that they will track the market index closely. (see column 6 lines 6-15 and column 7 lines 15-25).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include wherein data envelopment analysis (DEA) analysis is used to identify the relative ranking of the enterprise elements of value for the value relevant indicators identified by the business

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value predictive models taught by Tull, Jr in order to determine the value of an institution assets.

As per claim 17, Atkins fail to explicitly teach wherein the real option discount rates are a function of the relative ranking of the enterprise elements of value that support the real option.

However Tull, Jr discloses another relatively recent approach is offered by the Standard & Poor's Depositary Receipts.TM. ("SPDRs"). The SPDRs are financial instruments devised to package equity into a single listed security. They represent ownership in a SPDR Trust, a unit investment trust which holds a portfolio of common stocks that tracks the price performance and dividend yield of the S&P 500 Index. SPDRs are like open end unit trust that is rebalanced daily to the S&P 500 Index and may trade at a premium or discount to the S&P 500 futures SPDRs may be held like a stock for a long time and entitle the holder to quarterly cash distributions corresponding to the dividends that accrue to the S&P stocks in the underlying portfolio, less expenses. While the SPDRs provides desirable diversification and convenience, they are only offered in one capital market.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include the real option discount rates are a function of the relative ranking of the enterprise elements of value that support the real option taught by Tull, Jr in order to determine the institution asset value and position of value.

As per claim 18, Atkins fail to explicitly teach wherein the predictive models identify the relative contribution by element of value to the components of value and business value.

However Tull, Jr modeling system selects an optimized basket of shares which is representative of a particular capital market. This selection is done using a programming function which receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the basket

with the index of the market to ensure that they will track the market index closely. (see column 6 lines 6-15 and column 7 lines 15-25).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include the predictive models identify the relative contribution by element of value to the components of value and business value taught by Tull, Jr in order to determine the value of an institution assets.

As per claim 19, Atkins fail to explicitly teach where the predictive models use item performance indicators, composite variables or vectors by element as inputs.

However Tull, Jr modeling system selects an optimized basket of shares which is representative of a particular capital market. This selection is done using a programming function which receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the basket with the index of the market to ensure that they will track the market index closely. (see column 6 lines 6-15 and column 7 lines 15-25and 2 lines 1-14).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include where the predictive models use item performance indicators, composite variables or vectors by element as inputs taught by Tull, Jr in order to determine the value of an institution assets.

As per claim 20, Atkins discloses wherein the type of predictive model input that is used in a model is determined in part by the level of interaction between the elements of value.

However Tull, Jr modeling system selects an optimized basket of shares which is representative of a particular capital market. This selection is done using a programming function which receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the basket

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with the index of the market to ensure that they will track the market index closely. (see column 6 lines 6-15 and column 7 lines 15-25 and 2 lines 1-14).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include predictive model input that is used in a model is determined in part by the level of interaction between the elements of value taught by Tull, Jr in order to determine the value of an institution assets.

As per claim 21, Atkins discloses wherein item performance indicators are selected using predictive models from the group consisting of neural networks; regression models, regression trees; generalized autoregressive conditional heteroskedasticity (LARCH), projection pursuit regression; generalized additive model (GAM); redundant regression network; rough-set analysis; Naive Bayes Regression, linear regression; support vector computer readable medium, stepwise regression and multivalent models.(see column 23 lines 10-40).

As per claim 22, Atkins discloses wherein the contribution by element of value to a component of value or business value is determined by the net of the direct element impact and the element impact on the other elements of value.(see column 5 lines 23-45).

As per claim 23, Atkins fail to explicitly teach wherein the valuations identify the contributions by element of value to the group consisting of current operation value, real option value, market sentiment value, business value and combinations thereof.

However Tull, Jr discloses During the existence term of an OPALS, financial management structure fully administers the debt instrument using data processing system. Data processing system continuously monitors the price of the underlying basket of shares using input from a global communications network connected to the capital market place. Based on this information, data processing system computes the aggregate value of the entire underlying basket of shares and the current price of the OPALS by further including the accrued income and the appropriate maintenance expences. (see column 6 5-15 and column 6 lines 50-56).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include wherein the valuations identify the contributions by element of value to the group consisting of current operation value, real option value, market sentiment value, business value and combinations thereof taught by Tull, Jr in order to determine the value of a institution.

As per claim 24, Atkins fail to explicitly teach wherein the current operation value and market sentiment value are calculated using the company cost of capital.

However Tull, Jr discloses Another step used in the selection of the model portfolio involves analysis of the capitalization of the stocks in the selected portfolio. Capitalization may be defined as the value obtained by multiplying the total number of outstanding shares of a stock by the current price of the stock risk evaluation means computes the capitalization of each stock in the model basket, adds them up and divides the result by the number of stocks in the portfolio to obtain the average model capitalization. Risk evaluation means next determines or obtains from an outside source the average capitalization value for the particular market which is being followed and compares the result to the computed capitalization of the model basket. Should there be a discrepancy between the two values which is above a predetermined threshold, the program implemented by means may be directed to substitute either new stocks from the capital market or change the weighing of the stocks represented in the basket.(see column 7 lines 50 and column 6 lines 50-55).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include current operation value and market sentiment value are calculated using the company cost of capital taught by Tull, Jr in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security markets within a limited period of time. More particularly, the invention relates to an integrated financial management system for implementing investor participation in domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

As per claim 25, Atkins and Tull, Jr fail to explicitly wherein the enterprise may not have a current operation, real option or market sentiment segment to value.

However enterprise may not have a current operation, real option or market sentiment segment to value is old and well known in the art because they all represent the right to buy and sell property that is granted in exchange for an agreed amount within a period of time.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins and Tull to include enterprise may not have a current operation, real option or market sentiment segment to value because they all represent the right to buy and sell property that is granted in exchange for an agreed amount within a period of time.

As per claim 26, Atkins discloses wherein the business value by element of value is calculated by summing the contributions by element to the combination of current operation, real option and market sentiment values that are present in the enterprise.(see column 5 lines 25-35).

As per claim 27, Atkins and Tull, Jr fail to explicitly teach where the current operation segment of value is comprised of a revenue component of value, optional expense components of value and optional capital change components of value.

However a revenue component of value, optional expense components of value and optional capital change components of value are all old and well known in the art because they all represent values which may be part of an institution total assets and can be part of the information used to determine total asset value that institution.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins and Tull, Jr to include a revenue component of value, optional expense components of value and optional capital change components of value are all old and well known in the art because they all represent values which may be part of an institution total assets and can be part of the information used to determine total asset value that institution.

As per claim 28, Atkins fail to explicitly teach wherein the current operation value is calculated by summing the product of the net contribution by element to the

components of value identified by component predictive models and the capitalized value of the components of value that are present in the enterprise current operation.

However Tull, Jr discloses modeling system selects an optimized basket of shares which is representative of a particular capital market. This selection is done using a programming function which receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the basket with the index of the market to ensure that they will track the market index closely.(see column 6 lines 10-15) and this selection is done in accordance with one embodiment of the present invention using a mathematical programming function which employs data means for receiving and storing data about each stock in the capital market portfolio modeling means which correlate the available data with economic forecast models to suggest an optimal basket of stock shares; and risk evaluation means predicting the future correlation of the selected stocks in the basket with the market valuation. Risk evaluation means employs a multi-factor risk model and relies on optimization techniques to ensure that the subset of stocks underlying an OPALS will track the market index as closely as possible. The cooperation between data means, modeling means and risk evaluation means results in a basket of stock shares whose weighing further reflects liquidity considerations, industry exposure and market capitalization(see column 7 lines 15-65).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include the current operation value is calculated by summing the product of the net contribution by element to the components of value identified by component predictive models and the capitalized value of the components of value that are present in the enterprise current operation taught by Tull, Jr in order to in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security markets within a limited period of time. More particularly, the invention relates to an integrated financial management system for implementing investor participation in

domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

As per claim 29, Atkins fail to explicitly teach wherein contributions by element to real option values are determined by:

calculating the difference between the real option value calculated using the company cost of capital and the value calculated using the discount rate determined on the basis of relative element strength and assigning the value difference to the different elements of value based on their relative contribution to the difference in the two discount rates.

However using a mathematical programming function which employs data means for receiving and storing data about each stock in the capital market portfolio modeling means which correlate the available data with economic forecast models to suggest an optimal basket of stock shares; and risk evaluation means predicting the future correlation of the selected stocks in the basket with the market valuation. Risk evaluation means employs a multi-factor risk model and relies on optimization techniques to ensure that the subset of stocks underlying an OPALS will track the market index as closely as possible.

The cooperation between data means, modeling means and risk evaluation means results in a basket of stock shares whose weighing further reflects liquidity considerations, industry exposure and market capitalization.(see column 7 lines 16-65).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins and in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security markets within a limited period of time. More particularly, the invention relates to an integrated financial management system for implementing investor participation in domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

to include calculating the difference between the real option value calculated using the company cost of capital and the value calculated using the discount rate determined on the basis of relative element strength and assigning the value difference to the different elements of value based on their relative contribution to the difference in the two



discount rates in order to in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security markets within a limited period of time. More particularly, the invention relates to an integrated financial management system for implementing investor participation in domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

As per claim 30, Atkins discloses wherein contributions by element to market sentiment value are determined by subtracting any contributions by element to current operation value and real option value from the net contribution to business value identified by the business value predictive model.

As per claim 31, Atkins fail to explicitly teach where the element quantifications are continuously calculated for a specified point in time within a sequential series of points in time.

However Tull, Jr discloses a system and method for optimized selection of shares the performance of which is designed to track the performance of the related equity index over a limited period of time.(see column 3 lines 24-27).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include element quantifications are continuously calculated for a specified point in time within a sequential series of points in time in order to determine the value of assets.

As per claim 32, Atkins discloses where the intangible element quantifications are optionally reported using a paper document or electronic display.(see column 21 lines 65 and column 2 line 30-35).

As per claim 33, Atkins discloses a quantification system, comprising: a computer with a processor having circuitry to execute instructions; a storage device available to said processor with sequences of instructions stored therein, which when executed cause the processor . (see 22 lines 50-65 and column 23 and 24 lines 1-35 and line 60-65) and Enterprise.("i. e, financial institution" see column 5 lines 29-31"). Atkins fail to explicitly teach using data from a variety of sources to quantify the impact of intangible elements of value on aspects of financial performance.

However Tull, Jr discloses data processing system also receives input from the capital markets which input comprises raw transactions data for each stock.(see column 8 lines 49-59) and modeling system selects an optimized basket of shares which is representative of a particular capital market. This selection is done using a programming function which receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the basket with the index of the market to ensure that they will track the market index closely. (see column lines 6-30) and this selection is done in accordance with one embodiment of the present invention using a mathematical programming function which employs data means for receiving and storing data about each stock in the capital market portfolio modeling means which correlate the available data with economic forecast models to suggest an optimal basket of stock shares; and risk evaluation means predicting the future correlation of the selected stocks in the basket with the market valuation. Risk evaluation means employs a multi-factor risk model and relies on optimization techniques to ensure that the subset of stocks underlying an OPALS will track the market index as closely as possible. The cooperation between data means, modeling means and risk evaluation means results in a basket of stock shares whose weighing further reflects liquidity considerations, industry exposure and market capitalization. (see column 7 lines 15-65 and column 6 lines 50-55) and it is yet another object of the present invention to provide a computer system for maintaining financial debt instruments that represent positions in one or more capital markets and which generates reports on the return of each financial debt instrument to the investors.(see column 3 lines 20-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include using data from a variety of sources to quantify the impact of intangible elements of value on aspects of financial performance taught by Tull, Jr in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security

markets within a limited period of time. More particularly, the invention relates to an integrated financial management system for implementing investor participation in domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

As per claim 34, Atkins discloses a fiscal management network, comprising: a plurality of computers connected by a network each with a processor with having circuitry to execute instructions a storage device available to each processor with sequences of instructions stored therein which when executed cause the processors to. (see 22 lines 50-65 and column 23 and 24 lines 1-35 and line 60-65) and Enterprise. ("i. e, financial institution" see column 5 lines 29-31").

Atkins fail to explicitly teach integrate raw and transformed data from a variety of systems into models that determine the value of the current operation real options market sentiment segments of enterprise value by element of value and report the value of the elements of value, segments of value.

However Tull, Jr discloses data processing system also receives input from the capital markets which input comprises raw transactions data for each stock.(see column 8 lines 49-59) and modeling system selects an optimized basket of shares which is representative of a particular capital market. This selection is done using a programming function which receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the basket with the index of the market to ensure that they will track the market index closely. (see column lines 6-30) and this selection is done in accordance with one embodiment of the present invention using a mathematical programming function which employs data means for receiving and storing data about each stock in the capital market portfolio modeling means which correlate the available data with economic forecast models to suggest an optimal basket of stock shares; and risk evaluation means predicting the future correlation of the selected stocks in the basket with the market valuation. Risk evaluation means employs a multi-factor risk model and relies on optimization

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techniques to ensure that the subset of stocks underlying an OPALS will track the market index as closely as possible. The cooperation between data means, modeling means and risk evaluation means results in a basket of stock shares whose weighing further reflects liquidity considerations, industry exposure and market capitalization. (see column 7 lines 15-65 and column 6 lines 50-55) and it is yet another object of the present invention to provide a computer system for maintaining financial debt instruments that represent positions in one or more capital markets and which generates reports on the return of each financial debt instrument to the investors. (see column 3 lines 20-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include integrate raw and transformed data from a variety of systems into models that determine the value of the current operation real options market sentiment segments of enterprise value by element of value and report the value of the elements of value, segments of value Taught by Tull, Jr in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security markets within a limited period of time. More particularly, the invention relates to an integrated financial management system for implementing investor participation in domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

As per claim 35, Atkins discloses a fiscal management network, comprising: a plurality of computers connected by a network each with a processor with having circuitry to execute instructions a storage device available to each processor with sequences of instructions stored therein which when executed cause the processors to. (see 22 lines 50-65 and column 23 and 24 lines 1-35 and line 60-65) and Enterprise. ("i. e, financial institution" see column 5 lines 29-31").

Atkins fail to explicitly teach integrate raw and transformed data from a variety of systems into models that determine the value of the current operation real options market sentiment segments of enterprise value by element of value and report the value of the elements of value, segments of value.

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However Tull, Jr discloses data processing system also receives input from the capital markets which input comprises raw transactions data for each stock.(see column 8 lines 49-59) and modeling system selects an optimized basket of shares which is representative of a particular capital market. This selection is done using a programming function which receives and stores data about each stock in the capital market, correlates the available data with economic forecast models to suggest an optimal basket of stock shares which can model the performance of the overall market, and predicts the future correlation of the selected stocks in the basket with the index of the market to ensure that they will track the market index closely. (see column lines 6-30) and this selection is done in accordance with one embodiment of the present invention using a mathematical programming function which employs data means for receiving and storing data about each stock in the capital market portfolio modeling means which correlate the available data with economic forecast models to suggest an optimal basket of stock shares; and risk evaluation means predicting the future correlation of the selected stocks in the basket with the market valuation. Risk evaluation means employs a multi-factor risk model and relies on optimization techniques to ensure that the subset of stocks underlying an OPALS will track the market index as closely as possible. The cooperation between data means, modeling means and risk evaluation means results in a basket of stock shares whose weighing further reflects liquidity considerations, industry exposure and market capitalization. (see column 7 lines 15-65 and column 6 lines 50-55) and it is yet another object of the present invention to provide a computer system for maintaining financial debt instruments that represent positions in one or more capital markets and which generates reports on the return of each financial debt instrument to the investors.(see column 3 lines 20-60).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Atkins to include integrate raw and transformed data from a variety of systems into models that determine the value of the current operation real options market sentiment segments of enterprise value by element of value and report the value of the elements of value, segments of value

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Taught by Tull, Jr in order to manage financial debt instruments designed for investors whose objective is to track the performance of certain security markets within a limited period of time. More particularly, the invention relates to an integrated financial management system for implementing investor participation in domestic and foreign capital markets through positions in indexed vehicles which are packaged as debt instruments.

#### Conclusion

8 The prior art of record and not relied upon is considered pertinent to Applicants disclosure.

Berent (US 5,774,873 Patent ) teaches electronic online motor vehicle auction and information system.

.Shintani (US Patent 5,668,591) teaches information terminal apparatus that is remotely programmed by radio waves and that displays input keys of program functions on a display.

Brown (US Patent 5,794,219) teaches method of conducting an online auction with bid pooling.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clement B Graham whose telephone number is 703-305-1874. The examiner can normally be reached on 7am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 703-308-0505. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-0040 for regular communications and 703-305-0040 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CG

September 13, 2004

  
HYUNG SOUGH  
SUPERVISORY PATENT EXAMINER  
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